

ABSTRACT

A process and system is provided for manufacturing filters that has a filter medium bonded to a filter frame. A frame stock that has a hot-melt bonding material previously applied along its edge is formed into a frame and put around a filter medium. The partially assembled filter assembly is placed on a carrier that transports the filter assembly to a heating press, where heated top and bottom dies press on the frame to transfer heat to the frame to melt the hot-melt bonding material in the frame. The heated frame assembly is then transferred by the carrier into a cold sealing press, where upper and lower cooling dies engage the frame under pressure to cool the hot-melt bonding material to bond the filter medium edges to the frame.